

In the claims:

1. (Currently Amended) A process for producing a yarn suitable for tufting, said process comprising the steps of:
 - a. forming a bundle consisting essentially of a first base fiber, said first base fiber being selected from the group consisting of polyamides, [nylon-6, nylon-6,6,] polyesters, polyolefins, cotton and wool;
 - b. ring spinning or wrap spinning the bundle of fiber with a second fiber comprising a heat-activated binder material having a melting point range substantially below that of the base fiber to form a yarn, wherein said heat activated binder material has a melting point range of 105° to 190°C under ambient conditions, such that the second fiber is wrapped around or inserted into the bundle of first base fibers;
 - c. twisting two or more of the yarns to form a plied yarn comprising 0.1 to 12 weight percent of the binder material;
 - d. heating the plied yarn sufficiently to melt the binder material and causing the binder material to flow to intersecting points with the first base fiber; followed by
 - e. cooling the plied yarn to solidify the binder material to thereby encapsulate and bind the first base fiber and retain the twist in the plied yarn.
2. (Original) The process of claim 1 wherein said heating step occurs during twist setting of the plied yarn.
3. (Original) The process of claim 1, wherein the bundle of fiber is formed by spinning staple fiber.
4. (Withdrawn) A wrap spun yarn made in accordance with the process of claim 1.
5. (Withdrawn) A ring spun yarn made in accordance with the process of claim 1.
6. (Withdrawn) A process for producing a plied yarn suitable for tufting, said

process comprising the steps of:

- a. forming a bundle of fiber;
- b. ring spinning the bundle of fiber into a ring spun yarn;
- c. twisting at least two ring spun yarns with at least one second fiber to form a plied yarn, said second fiber(s) comprising a heat-activated binder material having a melting point of about 105 to 190 °C under ambient conditions, said plied yarn comprising 0.1 to 12 weight percent of the binder material;
- d. heating the plied yarn sufficiently to melt the binder material; followed by
- e. cooling the plied yarn to solidify the binder material.

7. (Withdrawn) The process of claim 6 wherein said heating step occurs during twist setting of the plied yarn.

8. (Withdrawn) The process of claim 6 wherein the bundle of fiber is formed by spinning staple fiber.

9. (Withdrawn) A plied yarn made in accordance with the process of claim 6.

10. (Withdrawn) The process of claim 6 wherein the twisting is ply twisting and wherein the ring spun yarns are wound with the second fiber(s) to form an assembly wound package to provide the feed yarns for ply twisting.

11. (Withdrawn) The process of claim 10 wherein said heating step occurs during twist setting of the plied yarn.

12. (Withdrawn) The process of claim 10 wherein the bundle of fiber is formed by spinning staple fiber.

13. (Withdrawn) A plied yarn in accordance with the process of claim 10.

14. (Previously Presented) The process of claim 1 wherein the base fiber is nylon-6 having melt point range of 215 to 225⁰C.
15. (Previously Presented) The process of claim 1 wherein the bundle consisting essentially of a first base fiber is selected from the group consisting of a sliver and a bundle of continuous filaments.
16. (New) The process of claim 1 wherein said first base fiber is a polyamide selected from the group consisting of nylon-6 and nylon-6,6.
17. (New) The process of claim 1 wherein said second fiber comprises a copolyamide.
18. (New) process of claim 1 wherein said second fiber comprises a copolyamide of nylon 6/nylon 6,6 or nylon6/nylon 6,6/nylon12.
19. (New) The process of claim 1 wherein said first base fiber is a polyamide and said second fiber comprises a copolyamide.
20. (New) The process of claim 1 wherein said first base fiber is a polyamide selected from the group consisting of nylon-6 and nylon-6,6 and wherein said second fiber comprises a copolyamide of nylon 6/nylon 6,6 or nylon6/nylon 6,6/nylon12.